

In the matter of

US Patent Application No. 10/553,006

DECLARATION

I, Nicholas Weatherby of EPL Composite Solutions Ltd do solemnly and sincerely declare as follows:

1. I am employed by EPL Composite Solutions Ltd of Unit 10, The Charnwood Business Park, North Road, Loughborough, Leicestershire, LE11 1QJ, from October 1994 as a Senior Composites Designer and from May 2001 to present as a Technical Director.
2. I have many years experience in the field of Pipe Lining Apparatus. As a designer in Composite Materials I have researched Thermoplastic pipe lining techniques since 1996 to present leading a team of engineers and constructing workable pipelining devices for prototype and evaluation. I have been involved in all aspects of pipeline design, development and manufacture of equipment including heating methods, glass pack deployment and control systems. This has necessitated a comprehensive knowledge of other lining systems as well as a solid understanding of the principles involved.
3. There is now shown to me a United States Patent document with Patent Number US 6 228 312 (hereinafter referred to as "Boyce"). Boyce discusses the use of a composite liner of thermoplastic filaments and reinforcing fibre filaments to line a duct. An example of the liner is given as TWINTEX. I am familiar with this type of liner and have had experience of using it since December 1997. The liner discussed in Boyce is porous and therefore permeable to air. The apparatus outlined in Figure 3 in Boyce is not able to produce an air gap between the duct and the liner. As the TWINTEX liner is not constrained in a device the air pressure will inflate the liner to the inside of the duct despite air passing through it. The air pressure will push

the liner to the inside of the duct, which then stops the airflow through the liner. Thus, Figure 3 of Boyce shows the earth, the duct and the liner pressed together without an air gap present.

4. There is now shown to me a Japanese Patent document with publication number JP1016632 entitled "Lining Technique for Pipeline" comprising an abstract in English and the remainder in Japanese. The liner shown in this document (labelled "1" in the Figures) comprises a relatively rigid liner that has a smaller diameter than that of the pipe to be lined. The liner requires heating from its inside and its outside sides to enable it to become sufficiently softened and flexible to expand to fill the duct. In each of the diagrams, the liner is shown to be pressed against the duct and the abstract states that the apparatus is able to expand the liner without it cracking and it is adhered to the duct. I therefore believe that the liner is not air permeable.

Signed.....

N Weatherby

Dr Nicholas Weatherby

Dated this

th

day of

June 2008